## SEQUENCE LISTING

<110> TURPEN, Thomas
GARGER, Stephen
MCCULLOCH, Michael
CAMERON, Terri
SAMNEK-POTTER, Michelle L.
HOLTZ, R. Barry

## <120> METHOD FOR RECOVERING PROTEINS FROM THE INTERSTITIAL FLUID OF PLANT TISSUES

<130> 00801.0135.US00

<140> 09/132,989

<141> 1998-08-11

<160> 1

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 7926

<212> DNA

<213> VIRAL

## <400> 1

gtatttttac aacaattacc aacaacaaca aacaacaaac aacattacaa ttactattta 60 caattacaat ggcatacaca cagacagcta ccacatcagc tttgctggac actgtccgag 120 gaaacaactc cttggtcaat gatctagcaa agcgtcgtct ttacgacaca gcggttgaag 180 agtttaacgc tcgtgaccgc aggcccaagg tgaacttttc aaaagtaata agcgaggagc 240 agacgcttat tgctacccgg gcgtatccag aattccaaat tacattttat aacacqcaaa 300 atgccgtgca ttcgcttgca ggtggattgc gatctttaga actggaatat ctgatgatgc 360 aaattcccta cggatcattg acttatgaca taggcgggaa ttttgcatcg catctgttca 420 agggacgage atatgtacae tgetgcatge ceaacetgga egttegagae ateatgegge 480 acgaaggcca gaaagacagt attgaactat acctttctag gctagagaga ggggggaaaa 540 cagtccccaa cttccaaaag gaagcatttg acagatacgc agaaattcct gaagacgctg 600 tetgteacaa taettteeag acaatgegae ateageegat geageaatea ggeagagtgt 660 atgccattgc gctacacagc atatatgaca taccagccga tgagttcggg gcggcactct 720 tgaggaaaaa tgtccatacg tgctatgccg ctttccactt ctctgagaac ctqcttcttq 780 aagattcata cgtcaatttg gacgaaatca acgcgtgttt ttcgcgcgat ggagacaagt 840 tgaccttttc ttttgcatca gagagtactc ttaattattg tcatagttat tctaatattc 900 ttaagtatgt gtgcaaaact tacttcccgg cctctaatag agaggtttac atgaaggagt 960 ttttagtcac cagagttaat acctggtttt gtaagttttc tagaatagat acttttcttt 1020 tgtacaaagg tgtggcccat aaaagtgtag atagtgagca gttttatact gcaatggaag 1080 acgcatggca ttacaaaaag actcttgcaa tgtgcaacag cgagagaatc ctccttgagg 1140 atteateate agteaattae tggttteeca aaatgaggga tatggteate gtaceattat 1200 togacattto tttggagact agtaagagga cgcgcaagga agtottagtg tocaaggatt 1260 tegtgtttae agtgettaae cacattegaa cataceagge gaaagetett acataegeaa 1320 atgttttgtc ctttgtcgaa tcgattcgat cgagggtaat cattaacggt gtgacagcga 1380 ggtccgaatg ggatgtggac aaatctttgt tacaatcctt gtccatgacg ttttacctgc 1440 atactaaget tgeegtteta aaggatgaet taetgattag caagtttagt eteggttega 1500

```
1560
aaacggtgtg ccagcatgtg tgggatgaga tttcgctggc gtttgggaac gcatttccct
ccgtgaaaga gaggctcttg aacaggaaac ttatcagagt ggcaggcgac gcattagaga
                                                                     1620
tcagggtgcc tgatctatat gtgaccttcc acgacagatt agtgactgag tacaaggcct
                                                                     1680
ctgtggacat gcctgcgctt gacattagga agaagatgga agaaacggaa gtgatgtaca
                                                                     1740
atgcactttc agagttatcg gtgttaaggg agtctgacaa attcgatgtt gatgtttttt
                                                                     1800
cccagatgtg ccaatctttg gaagttgacc caatgacggc agcgaaggtt atagtcgcgg
                                                                     1860
tcatgagcaa tgagagcggt ctgactctca catttgaacg acctactgag gcgaatgttg
                                                                     1920
cgctagcttt acaggatcaa gagaaggctt cagaaggtgc tttggtagtt acctcaagag
                                                                     1980
aagttgaaga accgtccatg aagggttcga tggccagagg agagttacaa ttagctggtc
                                                                     2040
ttgctggaga tcatccggag tcgtcctatt ctaagaacga ggagatagag tctttagagc
                                                                     2100
agtttcatat ggcaacggca gattcgttaa ttcgtaagca gatgagctcg attgtgtaca
                                                                     2160
egggteegat taaagtteag caaatgaaaa actttatega tageetggta geateactat
                                                                     2220
ctgctgcggt gtcgaatctc gtcaagatcc tcaaagatac agctgctatt gaccttgaaa
                                                                     2280
cccgtcaaaa gtttggagtc ttggatgttg catctaggaa gtggttaatc aaaccaacgg
                                                                     2340
ccaagagtca tgcatggggt gttgttgaaa cccacgcgag gaagtatcat gtggcgcttt
                                                                     2400
tggaatatga tgagcagggt gtggtgacat gcgatgattg gagaagagta gctgtcagct
                                                                     2460
ctgagtctgt tgtttattcc gacatggcga aactcagaac tctgcgcaga ctgcttcgaa
                                                                     2520
acggagaacc cgatgtcagt agcgcaaagg ttgttcttgt ggacggagtt ccgggctgtg
                                                                     2580
ggaaaaccaa agaaattctt tccagggtta attttgatga agatctaatt ttagtacctg
                                                                     2640
ggaagcaagc cgcggaaatg atcagaagac gtgcgaattc ctcagggatt attgtggcca
                                                                     2700
cgaaggacaa cgttaaaacc gttgattctt tcatgatgaa ttttgggaaa agacacagct
                                                                     2760
gtcagttcaa gaggttattc attgatgaag ggttgatgtt gcatactggt tgtgttaatt
                                                                     2820
ttcttgtggc gatgtcattg tgcgaaattg catatgttta cggagacaca cagcagattc
                                                                     2880
catacatcaa tagagtttca ggattcccgt accccgccca ttttgccaaa ttggaagttg
                                                                     2940
acgaggtgga gacacgcaga actactctcc gttgtccagc cgatgtcaca cattatctga
                                                                     3000
acaggagata tgagggcttt gtcatgagca cttcttcggt taaaaagtct gtttcgcagg
                                                                     3060
agatggtegg eggageegee gtgateaate egateteaaa accettgeat ggeaagatee
                                                                     3120
tgacttttac ccaatcggat aaagaagctc tgctttcaag agggtattca gatgttcaca
                                                                     3180
ctgtgcatga agtgcaaggc gagacatact ctgatgtttc actagttagg ttaaccccta
                                                                     3240
caccagtete cateattgea ggagacagee cacatgtttt ggtegeattg teaaggeaca
                                                                     3300
cctgttcgct caagtactac actgttgtta tggatccttt agttagtatc attagagatc
                                                                     3360
tagagaaact tagctcgtac ttgttagata tgtataaggt cgatgcagga acacaatagc
                                                                     3420
aattacagat tgactcggtg ttcaaaggtt ccaatctttt tgttgcagcg ccaaagactg
                                                                     3480
gtgatatttc tgatatgcag ttttactatg ataagtgtct cccaggcaac agcaccatga
                                                                     3540
tgaataattt tgatgctgtt accatgaggt tgactgacat ttcattgaat gtcaaagatt
                                                                     3600
3660
ctatggtacg aacggcggca gaaatgccac gccagactgg actattggaa aatttagtgg
                                                                     3720
cgatgattaa aaggaacttt aacgcacccg agttgtctgg catcattgat attgaaaata
                                                                     3780
ctgcatcttt agttgtagat aagttttttg atagttattt gcttaaagaa aaaagaaaac
                                                                     3840
caaataaaaa tgtttctttg ttcagtagag agtctctcaa tagatggtta gaaaagcagg
                                                                     3900
aacaggtaac aataggccag ctcgcagatt ttgattttgt agatttgcca gcagttgatc
                                                                     3960
agtacagaca catgattaaa gcacaaccca agcaaaaatt ggacacttca atccaaacgg
                                                                     4020
agtacccggc tttgcagacg attgtgtacc attcaaaaaa gatcaatgca atatttggcc
                                                                     4080
cgttgtttag tgagcttact aggcaattac tggacagtgt tgattcgagc agatttttgt
                                                                     4140
ttttcacaag aaagacacca gcgcagattg cggatttctt cggagatctc gacagtcatq
                                                                     4200
tgccgatgga tgtcttggag ctggatatat caaaatacga caaatctcag aatgaattcc
                                                                     4260
actgtgcagt agaatacgag atctggcgaa gattgggttt tgaagacttc ttgggagaag
                                                                     4320
tttggaaaca agggcataga aagaccaccc tcaaggatta taccgcaggt ataaaaactt
                                                                     4380
gcatctggta tcaaagaaag agcggggacg tcacgacgtt cattggaaac actgtgatca
                                                                     4440
ttgctgcatg tttggcctcg atgcttccga tggagaaaat aatcaaagga gccttttgcg
                                                                     4500
gtgacgatag tctgctgtac tttccaaagg gttgtgagtt tccggatgtg caacactccg
                                                                     4560
cgaatcttat gtggaatttt gaagcaaaac tgtttaaaaa acagtatgga tacttttgcg
                                                                     4620
gaagatatgt aatacatcac gacagaggat gcattgtgta ttacgatccc ctaaagttga
                                                                     4680
tctcgaaact tggtgctaaa cacatcaagg attgggaaca cttggaggag ttcagaaggt
                                                                     4740
```

```
ctctttgtga tgttgctgtt tcgttgaaca attgtgcgta ttacacacag ttggacgacg
                                                                     4800
ctgtatggga ggttcataag accgcccctc caggttcgtt tgtttataaa agtctggtga
                                                                     4860
                                                                     4920
agtatttgtc tgataaagtt ctttttagaa gtttgtttat agatggctct agttgttaaa
ggaaaagtga atatcaatga gtttatcgac ctgacaaaaa tggagccgat cttaccgtcg
                                                                     4980
atgtttaccc ctgtaaagag tgttatgtgt tccaaagttg ataaaataat ggttcatgag
                                                                     5040
aatgagtcat tgtcagaggt gaaccttctt aaaggagtta agcttattga tagtggatac
                                                                     5100
gtctgtttag ccggtttggt cgtcacgggc gagtggaact tgcctgacaa ttgcagagga
                                                                     5160
ggtgtgagcg tgtgtctggt ggacaaaagg atggaaagag ccgacgaggc cactctcgga
                                                                     5220
tottactaca cagcagotgo aaagaaaaga tttcagttca aggtogttoo caattatgot
                                                                     5280
ataaccaccc aggacgcgat gaaaaacgtc tggcaagttt tagttaatat tagaaatgtg
                                                                     5340
aagatgtcag cgggtttctg tccgctttct ctggagtttg tgtcggtgtg tattgtttat
                                                                     5400
agaaataata taaaattagg tttgagagag aagattacaa acgtgagaga cggagggccc
                                                                     5460
atggaactta cagaagaagt cgttgatgag ttcatggaag atgtccctat gtcgatcagg
                                                                     5520
cttgcaaagt ttcgatctcg aaccggaaaa aagagtgatg tccgcaaagg gaaaaatagt
                                                                     5580
agtaatgatc ggtcagtgcc gaacaagaac tatagaaatg ttaaggattt tggaggaatg
                                                                     5640
agttttaaaa agaataattt aatcgatgat gattcggagg ctactgtcgc cgaatcggat
                                                                     5700
tegttttaaa taegetegag ateaateate cateteegaa gtgtgtetge ageatgeagg
                                                                     5760
tgctgaacac catggtgaac aaacacttct tgtccctttc ggtcctcatc gtcctccttg
                                                                     5820
geeteteete caactigaca geegggeaag teetgtitea gggatteaac tgggagtegt
                                                                     5880
ggaaggagaa tggcgggtgg tacaacttcc tgatgggcaa ggtggacgac atcgccgcag
                                                                     5940
ceggcateac ccaegtetgg cteecteege egteteacte tgteggagag caaggetaca
                                                                     6000
tgcctgggcg gctgtacgat ctggacgcgt ctaagtacgg caacgaggcg cagctcaagt
                                                                     6060
cgctgatcga ggcgttccat ggcaagggcg tccaggtgat cgccgacatc qtcatcaacc
                                                                     6120
accgcacggc ggagcacaag gacggccgag gcatctactg cctcttcgag ggcgggacgc
                                                                     6180
cegacteceg cetegactgg ggccegcaca tgatetgeeg cgacgacece tacggegatg
                                                                     6240
gcaccggcaa cccggacacc ggcgccgact tcgccgccgc gccggacatc gaccacctca
                                                                     6300
acaagcgcgt ccagcgggag ctcattggct ggctcgactg gctcaagatg gacatcggct
                                                                     6360
tegacgegtg gegeetegae ttegecaagg getacteege egacatggea aagatetaca
                                                                     6420
tegacgecac egageegage ttegeegtgg eegagatatg gacgtecatg gegaaeggeg
                                                                     6480
gggacggcaa gccgaactac gaccagaacg cgcaccggca ggagctggtc aactgggtcg
                                                                     6540
ategtgtegg eggegeeaac ageaacggea eggegttega etteaceace aagggeatee
                                                                     6600
teaacgtege egtggaggge gagetgtgge geeteegegg egaggaegge aaggegeeeg
                                                                     6660
gcatgatcgg gtggtggccg gccaaggcga cgaccttcgt cgacaaccac gacaccggct
                                                                     6720
cgacgcagca cctgtggccg ttcccctccg acaaggtcat gcagggctac gcatacatcc
                                                                     6780
tcacccaccc cggcaaccca tgcatcttct acgaccattt cttcgattgg ggtctcaagg
                                                                     6840
aggagatega gegeetggtg teaateagaa aeeggeaggg gateeaeeeg gegagegage
                                                                     6900
tgcgcatcat ggaagctgac agcgatctct acctcgcgga gatcgatggc aaggtgatca
                                                                     6960
caaagattgg accaagatac gacgtcgaac acctcatccc cgaaggettc caggtcgtcg
                                                                     7020
cgcacggtga tggctacgca atctgggaga aaatctgacc taggctcgca aagtttcgaa
                                                                     7080
ccaaatcctc aaaaagaggt ccgaaaaata ataataattt aggtaagggg cgttcaggcg
                                                                     7140
7200
atgaagccga gacgtcggtc gcggattctg attcgtatta aatatgtctt actcaatcac
                                                                     7260
ttctccatcg caatttgtgt ttttgtcatc tgtatgggct gaccctatag aattgttaaa
                                                                     7320
cgtttgtaca aattcgttag gtaaccagtt tcaaacacag caagcaagaa ctactgttca
                                                                     7380
acagcagttc agcgaggtgt ggaaaccttt ccctcagagc accgtcagat ttcctggcga
                                                                     7440
tgtttataag gtgtacaggt acaatgcagt tttagatcct ctaattactg cgttgctggg
                                                                     7500
ggcttttgat actaggaata gaataatcga agtagaaaac cagcagagtc cgacaacagc
                                                                     7560
tgaaacgtta gatgctaccc gcagggtaga cgacgctacg gttgcaattc ggtctgctat
                                                                     7620
aaataattta gttaatgaac tagtaagagg tactggactg tacaatcaga atacttttga
                                                                     7680
aagtatgtet gggttggtet ggaeetetge acetgeatet taaatgeata ggtgetgaaa
                                                                     7740
tataaagttt gtgtttctaa aacacacgtg gtacgtacga taacgtacag tgtttttccc
                                                                     7800
tggacttaaa tcgaagggta gtgtcttgga gcgcgcggag taaacatata tggttcatat
                                                                     7860
atgtccgtag gcacgtaaaa aaagcgaggg attcgaattc ccccggaacc cccggttggg
                                                                     7920
gcccag
                                                                     7926
```